

WHAT IS CLAIMED IS:

1. A method for emulating an operation of a dynamically reconfigurable computer system, the method comprising the steps of:

providing operational data communication between a host device and an emulator;

and

employing said provided operational data to control an operation of an emulated device at said emulator.

2. The method of claim 1 further comprising the step of:

providing user data communication between said host device and said emulator.

3. The method of claim 2 wherein said step of providing operational data comprises the step of:

establishing a power level for said operation of said emulated device.

4. The method of claim 3 further comprising the step of:

adjusting the operation of said emulated device according to said established power level.

5. The method of claim 4 wherein said adjusting step comprises the step of:

adjusting said provision of user data communication between said host device and said emulator according to said established power level.

6. The method of claim 3 wherein said step of providing operational data comprises:

dynamically modifying said established power level to emulate one of a connection and a disconnection of a power attachment for said emulated device.

5 7. The method of claim 6 further comprising the step of:
continuously adjusting the operation of said emulated device based upon said dynamically modified established power level.

8. The method of claim 7 wherein said continuously adjusting step comprises the step of:

discontinuing provision of user data communication when upon occurrence of said disconnection of said power attachment to said emulated device.

9. The method of claim 1 wherein said step of providing operational data communication comprises the step of:

15 establishing an address at said host device to which said emulated device is connected.

10. The method of claim 9 wherein said step of providing operational data communication comprises:

modifying said established address at said host device to which said emulated device is connected.

11. The method of claim 1 wherein said step of providing operational data communication comprises the step of:

providing a fault detect signal to said host device to indicate a fault condition within said emulated device.

5 12. The method of claim 1 wherein said step of providing operational data communication comprises the step of:

dynamically detecting a connection of said emulator to said host device.

13. The method of claim 1 wherein said step of providing operational data communication comprises the step of:

enabling control at least one component within said emulated device by said host device.

14. A system for emulating an operation of a peripheral device, the system comprising:

a host device;

15 an emulator connected to said host device; and

at least one control data line deployed between said host device and said emulator.

15. The system of claim 14 further comprising:

at least one power data line deployed between said host device and said emulator.

16. The system of claim 15 wherein said at least one power line comprises:
a power supply line for dynamically detecting a connection of said emulator to said
host device.

17. The system of claim 14 wherein said at least one control line comprises:
a motor control line for activating a component within a device emulated by said
emulator.

18. A computer program product having a computer readable medium having
computer program logic recorded thereon for emulating an operation of a dynamically
reconfigurable computer system, the computer program product comprising:

code for providing operational data communication between a host device and an
emulator;

code for employing said provided operational data to control an operation of an
emulated device at said emulator; and

code for conducting user data communication between said host device and said
emulator in accordance with contents of said operational data.

19. The computer program product of claim 18 wherein said code for providing
operational data comprises:

code for establishing a power level for said operation of said emulated device.

20. The computer program product of claim 19 wherein said code for providing
operational data comprises:

